

DRAWINGS AND PERFORMANCE DATA

FIG. 1 Wavelet Tiling of an N-Point Digital t-f Space

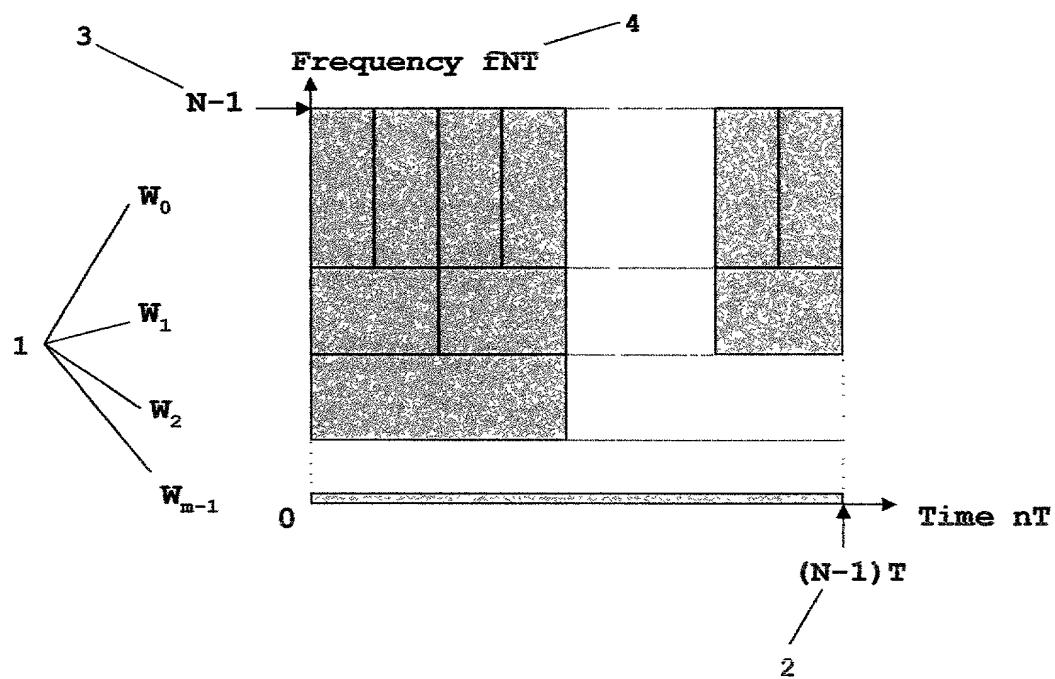


FIG. 2 Wavelet Iterated Filter Bank for Tiling t-f  
Space in FIG. 1

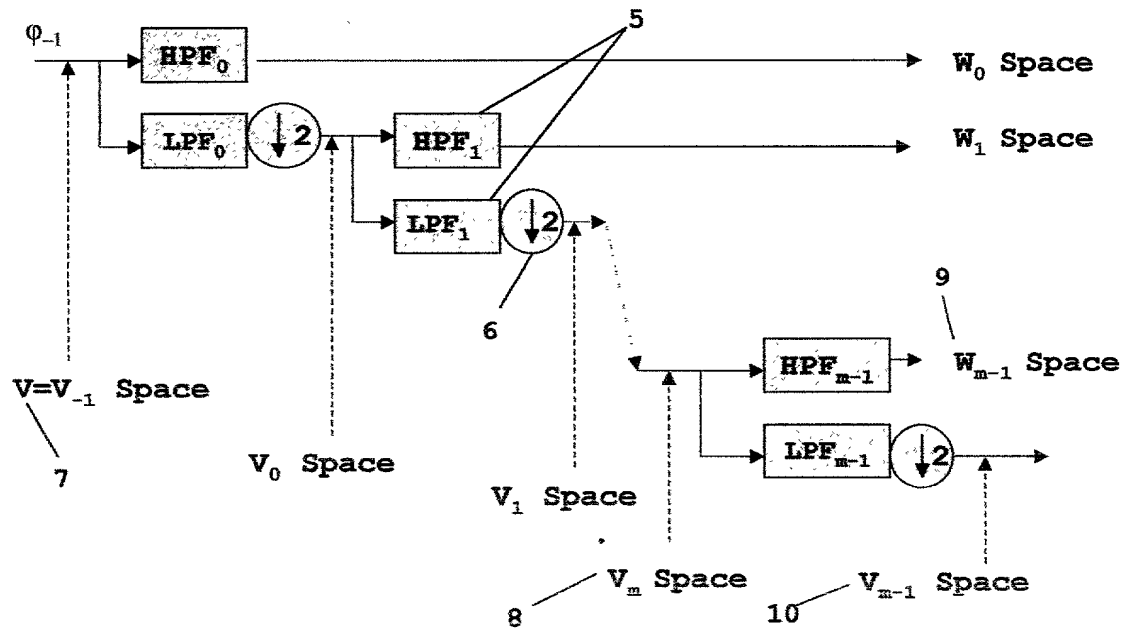


FIG. 3 PSD Requirements for Communications

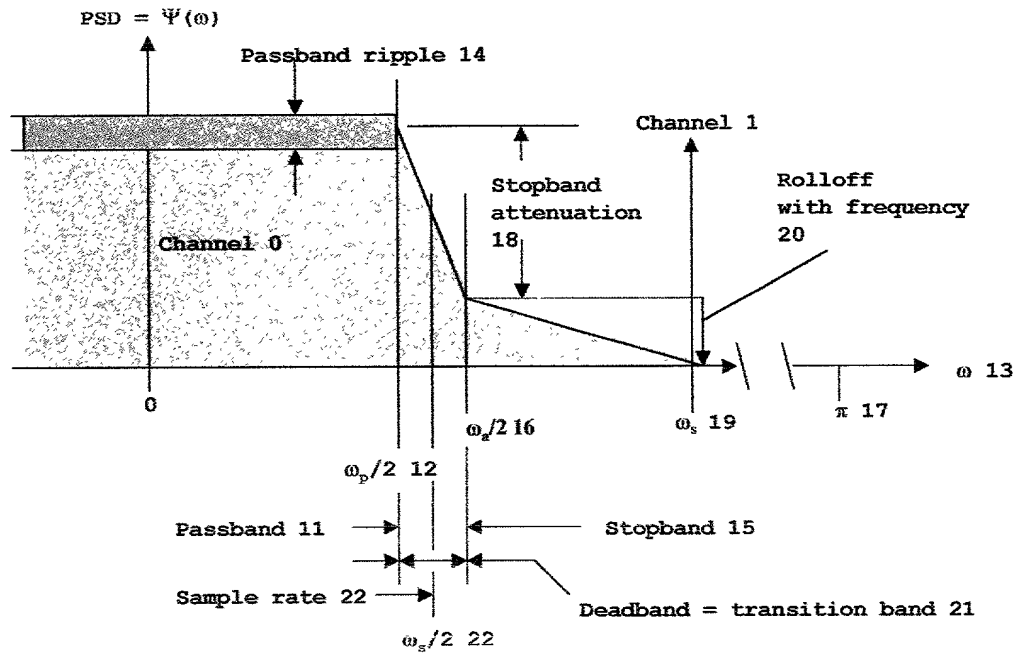


FIG. 4 LS Metrics and Cost Function

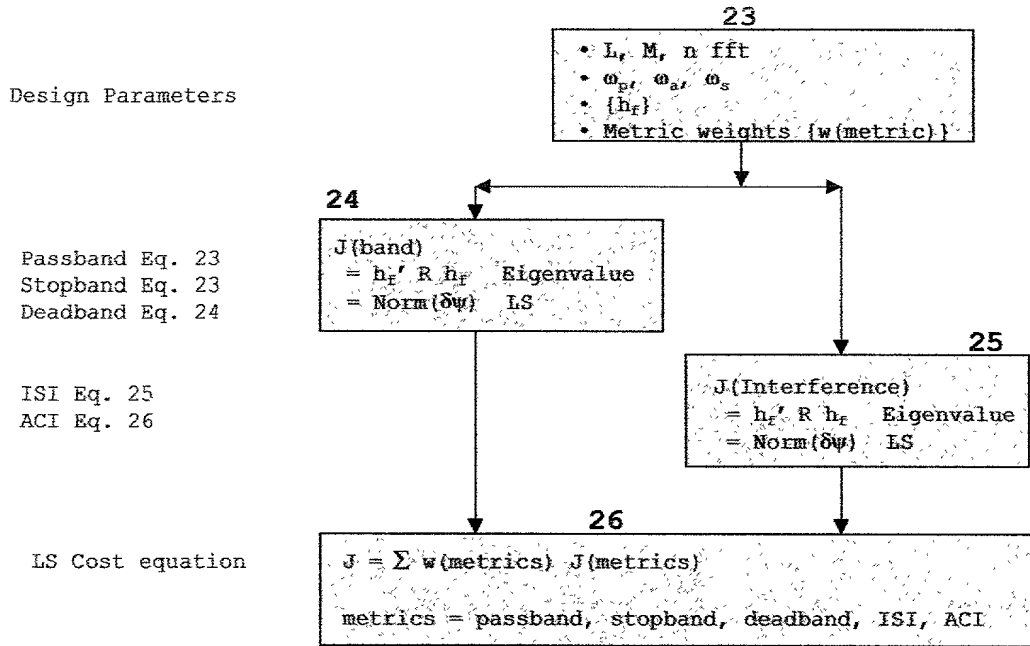


FIG. 5 LS Recursive Solution Algorithm

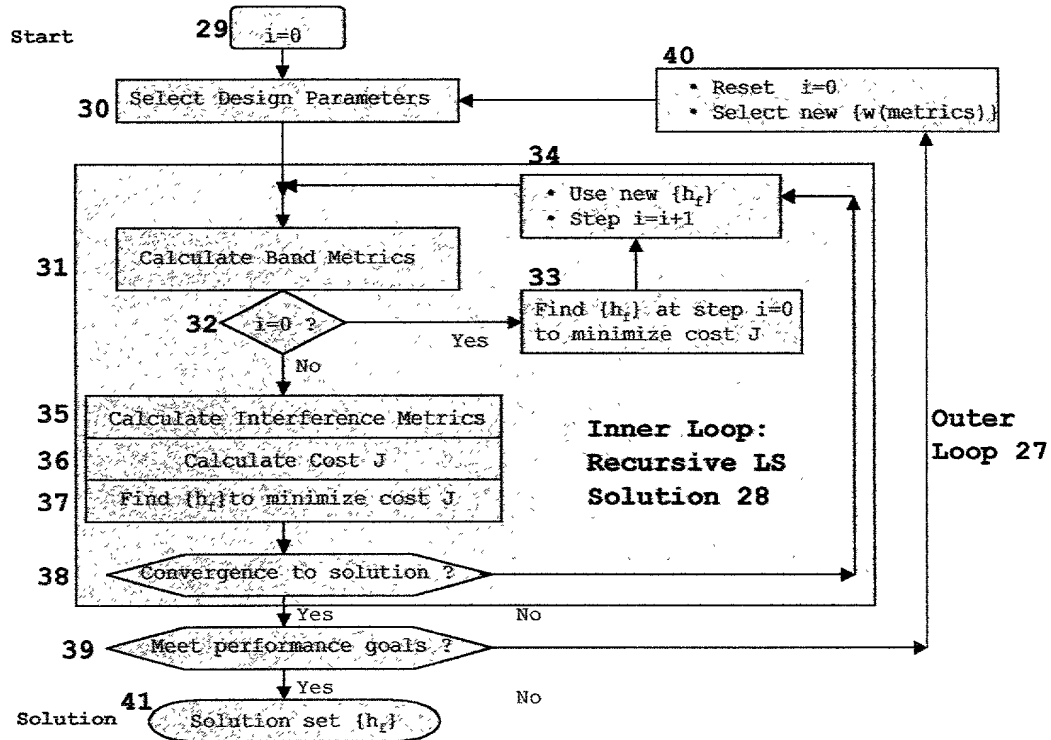
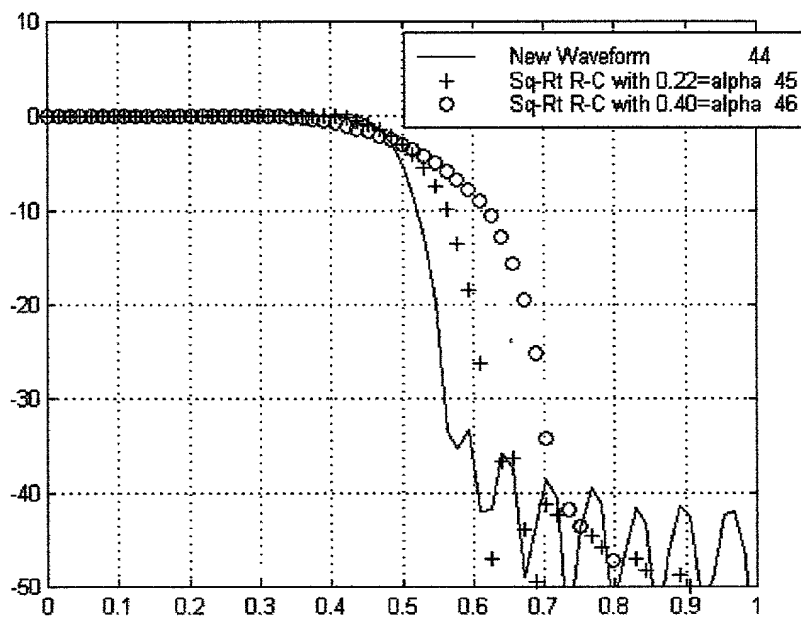


FIG. 6 PSD for New Waveform and Square-Root Raised-Cosine

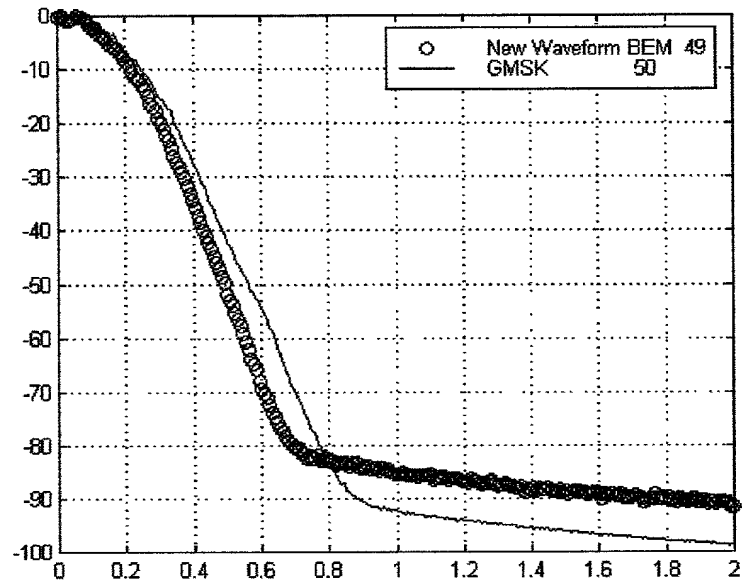
Power spectral density PSD, dB 42



Normalized frequency, symbol rate 43

FIG. 7 PSD for New Waveform BEM and GMSK

Power spectral density PSD, dB 47



Normalized frequency, bit rate 48

**FIG. 8 Radar Ambiguity Functions of New Waveform  
and Unweighted Chirp Waveform**

New Wavelet Ambiguity Function 51

Unweighted Chirp Ambiguity Function 52

